

Project Narrative

Girard Brothers Corporation - 80 Wolcott Road

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Girard Brothers Corporation proposes to purchase the 80 Wolcott Road Site, change the Zone from I-1 to I-2 to eliminate an existing non-conformance of this site to the lot area requirements of the current Zone, sell a small portion of the site to Phonon to allow Phonon to expand their currently approved parking area and provide much needed parking for its current and future employees and develop the balance of the site as new Corporate Offices and the Main Facility for Simscroft Echo Farms. The site is ideally suited for this use: it is in an industrial area, on the far edge of Town, and vehicles coming from or going to other towns can access the site from nearby State Highways with little travel on Simsbury's roads.

A new industrial building containing 6400 sf of office space and 9000 sf of vehicle storage and maintenance space will be added to the site with an additional 3000 sf of vehicle storage and maintenance space proposed as a future addition. The addition will be constructed in response to demands for additional storage space. The vehicle storage and maintenance space will have floor drains draining to an external 1000 gallon DEEP approved oil/water separator. The discharge from the oil/water separator will join other sewage discharge from the office portion of the building and drain through a new sanitary lateral to the existing sanitary sewer in Wolcott Road.

The existing building will be retained and used for vehicle, equipment and/or material storage and currently contains a single lavatory served by an existing septic system. The septic system serving this building will be abandoned in accordance with the Public Health Code and the existing waste pipe will be connected to the new sewer lateral serving the new building. Both buildings will then be served by sanitary sewer.

The existing building is served by a water service connected to the existing 12" water main in Wolcott Road. A new 2" domestic water service and a new 6" fire service line will be installed to service the new building. The nearest fire hydrant is located opposite the center entrance to the site providing excellent coverage of the property.

Additional site entrance drives are proposed to the north and south of the existing site entrance and there will be paved and processed stone drives providing access to all sides of the existing and proposed buildings. The new building construction, exiting and occupancy capacities and all other items are designed and will be constructed in accordance with the current Building and Fire Codes and the new building will be sprinklered, if required by these codes. "No Parking - Fire Lane" signs are proposed on the drives serving this site to insure safe emergency access.

The northerly access drive will be utilized primarily by passenger cars and pick-up sized vehicles belonging primarily to employees and visitors. Visitors and office staff will park primarily in paved parking spaces at the front of the office portion of the new building and in paved parking spaces along the northerly property line against Phonon. Field personnel will park primarily in gravel parking spaces along the northerly property line against the airport property. There are additional parking spaces situated near the existing building and employees who are occupied there will utilize those parking spaces on a daily basis.

The southerly access drive will be the main access drive for large trucks and construction equipment. A crushed stone entrance pad is proposed at the back edge of the pavement, over 270 feet from Wolcott Road. Truck and equipment leaving site will drive over this stone pad which will scrub most of the dirt from the truck's wheels prior to their driving over the pavement for 270+ feet to Wolcott Road. This will insure that trucks reaching Wolcott road will have their wheels as clean as possible, thereby minimize sediment on Wolcott Road. The pavement between the stone entrance pad and Wolcott Road will be swept as often as necessary to keep this area clean and Wolcott Road will be swept as necessary to remove any sediment that makes its way onto the street.

The center drive will be reconstructed and utilized primarily by passenger cars and pick-up sized vehicles and some mid-sized trucks. Sight line distances from all of the drives have been measured and found to be adequate for the intended use.

The front portion of the site will be paved with heavy duty pavement on a thick base and the areas behind this pavement will be surfaced with recycled processed gravel and used for the parking and storage of trucks and construction equipment. Areas to the rear of the graveled portion of the site will be used for the storage of construction materials while the southern portion of the site will be used for the storage of earth materials and other construction materials for sale and for use on offsite construction projects.

A security fence exists around the entire perimeter of the site and the portion of this fence along the frontage of Wolcott Road will be removed. A new security fence will be constructed further from the road, tied to the buildings and containing new gates to control access to the site. Landscaping along the sides and rear of the site will remain and the landscaping along the Wolcott Road frontage will be enhanced. New landscaping berms will be constructed in front of each building to filter or shield the view of parking areas and the uses within the site with the berm at the southern portion of the frontage constructed a bit higher than the others to better screen the proposed uses in this area.

The site soils consist of Windsor Sandy Loam, a Hydrologic Group A soil that is extremely well drained. Deep tests to over 14 feet encountered no water table this spring.. Storm water runoff from the site currently flows in three directions. A small strip of land along Wolcott Road drains into Wolcott Road and this will remain essentially unchanged. A small area of the site drains to northeast and this will remain essentially unchanged. The greater portion of the site drains to the south and then runs onto land of the Town of Simsbury.

Historically, the property was predominantly covered with hoop houses and used for seed beds and as a plant nursery. Storm Water runoff from the roofs of the hoop houses drained by sheet flow over the sandy site, with a significant portion of the flow being absorbed by the existing soil. To replicate this condition, the roof of the new building, the northerly half of the roof of the existing building and almost all of the paved areas will drain to a series of catch basins connected with horizontal 24 inch diameter perforated HDPE pipes set in 2" stone. The stone will extend 12" below, above and to both sides of the pipe and will be wrapped with Marifi filter fabric to keep the fines in the existing soil from migrating into the voids in the stone. Storm water runoff will enter the catch basins via roof leaders and sheet flow from the paved areas, drain into the horizontal 24 inch diameter perforated HDPE pipe and then into the voids in the stone, to be absorbed by the surrounding soil. The diameter and length of the pipe, its internal volume and the total of the volume of the voids in the stone have been revised and revised again such that, during a 10-year design storm, all of the runoff reaching the retention/absorption system will be retained and absorbed with no overflow of stormwater runoff onto surrounding areas.

The southerly half of the roof on the existing building, the small area of pavement to the south of the existing building and balance of the site will drain via sheet flow to intercepting swales along the east and south property lines. These grass lined swales will transport any storm flow not absorbed by the on-site soils to a settling basin excavated in the south east corner of the site which has been designed to replicate the DEEP required settling basin installed at Iron Horse Boulevard. The runoff from a 1" rainfall has been analyzed and the size of the settling basin reviewed to insure the required Water Quality Volume is provided. Due to the porous nature of the area draining to the settling basin, the required Water Quality Volume based on the runoff from a 1" rainfall is only 632 cubic feet. The volume of the settling basin is 15,400 cubic feet or approximately 24 times the required volume. The size of the settling basin was selected to provide a retention function to keep proposed flows from exceeding pre-development flows and to provide a significant sediment settling and removal function during larger storms. The infiltration function of the settling basin has been ignored in these calculations.

The attached study utilizes SCS TR20 methodology and HYDROCADD software to determine the rates of storm water flow created by pre-development and post-development conditions. The previous site condition included a significant portion of the site covered with hoop houses. These structures existed for years and were only recently removed. The inclusion of these hoop houses in the pre-development analysis of this site would have resulted in significantly higher rates of runoff and significant higher volumes of runoff than would exist without the inclusion of the hoop houses. It was decided to utilize the condition of the property immediately prior to the creation of this application, which yields lower rates and volumes of runoff, and then design to meet these reduced rates.

A computer model of existing and proposed conditions was created and the 1", 2, 5, 10, 25 and 50 year design storm events were routed through the models to determine the pre-development and post-development rates and volumes of storm water flow from the areas included in the drainage study, which are as follows:

RATES OF FLOW (CFS)

Storm	Existing Flow To Airport	Proposed Flow To Airport	Existing Flow To Wolcott Rd.	Proposed Flow To Wolcott Rd.	Total Existing Flow	Total Proposed Flow
1"	0.02	0.00	0.00	0.00	0.02	0.02
2 YR	1.92	0.74	0.15	0.01	5.51	0.89
5 YR	3.08	1.31	0.35	0.07	9.85	3.40
10 YR	3.89	1.73	0.51	0.17	13.04	7.75
25 YR	5.01	2.32	0.73	0.33	17.53	13.92
50 YR	6.01	2.86	0.94	0.49	21.64	20.73

VOLUME OF FLOW (CF)

Storm	Existing Volume To Airport	Proposed Volume To Airport	Existing Volume To Wolcott Rd.	Proposed Volume To Wolcott Rd.	Total Existing Volume	Total Proposed Volume
1"	321	28	0	0	383	105
2 YR	8,127	3,145	648	199	30,280	11,764
5 YR	12,679	5,239	1,213	535	50,637	28,400
10 YR	15,923	6,778	1,649	828	65,633	40,547
25 YR	20,432	8,958	2,278	1,290	86,944	57,717
50 YR	24,509	10,961	2,889	1,751	106,556	74,117

It can be seen from an examination of the attached storm drainage study and the above data that the goal of reducing both the rates of storm water runoff from the site and the volumes of runoff draining onto adjacent properties from the site has been achieved.